15

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[0027]

Sequence	

- <110> President of Nara Institute Science and Technology
- <120> Theobromine synthase polypeptide of coffee plant and the gene encoding said polypeptide
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 - <212> Amino acid
- 10 <213> Caffea arabica
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 EKENGRKIGS CLISAMPGSF YGRLFFEESM HFLHSCYSVH WLSQVPSGLV IELGIGANKG 180
 SIYSSKGCRP FVQKAYLDQF TKDFTTFLRI HSKELFSRGR MLLTCICKVD EFDEFNPLDL 240
 LDMAINDLIV EGLLEEEKLD SFNIPFFTPS AEEVKCIVEE EGSCEILYLE TFKAHYDAAF 300
 SIDDDYPVRS HEQIKAEYVA SLIRSVYEPI LASHFGEAIM FDLFHRLAKH AAKVLHMGKG 360
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 - <211> 1298
 - <212> Nucleic acid
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 CAACAAGTGC ATTAAAGTTG CGGATTTGGG ATGCGCTTCT GGACCAAACA CACTTTTAAC 240

AGCAGTCGCA ATTCGATTGT CCTGCATATG AATGGAGCTC CAAGAAGTCC TGCATATGAA

- CAAGTTGCTG CCAAGCTTCT ACCGCAAACT CGAGAAAGAA AATGGACGCA AGATAGGATC 420
- GTGCCTAATA AGCGCAATGC CTGGCTCTTT CTACGGCAGA CTCTTCCCCG AGGAGTCCAT 480
 - GCATTTTTTG CACTCTTGTT ACAGTGTTCA TTGGTTATCT CAGGTTCCCA GCGGTTTGGT 540

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	GCCCGTCCAG	AAGGCATATT	TGGATCAATT	TACGAAAGAT	TTTACCACAT	TTCTAAGGAT	660
	TCATTCGAAA	GAGTTGTTTT	CACGTGGCCG	AATGCTCCTT	ACCTGCATTT	GTAAAGTAGA	720
	TGAATTCGAC	GAACCGAATC	CCCTAGACTT	ACTTGACATG	GCAATAAACG	ACTTGATTGT	780
5	TGAGGGACTT	CTGGAGGAAG	AAAAATTGGA	TAGTTTCAAT	ATTCCATTCT	TTACACCTTC	840
	AGCAGAAGAA	GTAAAGTGCA	TAGTTGAGGA	GGAAGGTTCT	TGCGAAATTT	TATATCTGGA	900
	GACTTTTAAG	GCCCATTATG	ATGCTGCCTT	CTCTATTGAT	GATGATTACC	CAGTAAGATC	960
	CCATGAACAA	ATTAAAGCAG	AGTATGTGGC	ATCATTAATT	AGATCAGTTT	ACGAACCCAT	102
	CCTCGCAAGT	CATTTTGGAG	AAGCTATTAT	GCCTGACTTA	TTCCACAGGC	TTGCGAAGCA	108
0	TGCAGCAAAG	GTTCTCCACA	TGGGCAAAGG	CTGCTATAAT	AATCTTATCA	TTTCTCTCGC	114
	CAAAAAGCCA	GAGAAGTCAG	ACGTGTAAAA	GTTTGTTTT	AGTTGGTTTT	TGTGCCGTTG	120
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RSIYSSKASP PPVQKAYLDQ FTKDFTTFLR MRSEELLSRG RMLLTCICKG DECDGPNTMD 240

LLEMAINDLV AEGRLGEEKL DSFNVPIYTA SVEEVKCMVE EEGSPEILYL QTFKLRYDAG 300

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<211>385

25 <212> Amino acid

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<400> 5

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LEKENGRKIG SCLIAAMPGS FHGRLFFEES MHFLHSSYSL QFLSQVPSGL VTELGITANK 180
RSIYSSKASP PPVQKAYLDQ FTKDFTTFLR IRSEELLSRG RMLLTCICKG DEFDGPNTMD 240
LLEMAINDLV VEGHLEEEKL DSFNVPIYAA SVEELKCIVE EEGSFEILYL ETFKLRYDAG 300

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	ACTGGTTCTC	GCCAAGGTGA	AACCTGTCCT	TGAACAATGC	GTAGGGGAAT	TGTTGCGGGC	180		
	CAACTTGCCC	AACATCAACA	AGTGCATTAA	AGTTGCGGAT	TTGGGATGCG	CTTCCGGACC	240		
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	CCCCGAGGAG	TCAATGCATT	TTTTACACTC	TTCTTACAGI	CTTCAATTT	TATCCCAGGT	540		
	TCCCAGCGGT	TTGGTGACTG	AATTGGGGAT	CACTGCGAAG	AAAAGGAGCA	TTTACTCTTC	600		
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	CATTTGCAAA	GGAGATGAAT	TCGACGGCCC	GAATACCAT	GACTTACTT	G AGATGGCAAT	780		
	AAACGACTTO	GTTGTTGAG	GACATCTGGA	GGAAGAAAA	A TTGGACAGTT	TCAATGTTCC	840		

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25 GGCATCATTA CTTAGATCAG TTTACGAACC CATCCTCGCA AATCATTTTG GAGAAGCTAT 1080

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AGGCTTCTAT AATAATCTTA TCATTTCTCT TGCCAAAAAAA CCAGAGAAGT CAGACATATA 1200

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1304

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		LEKENGRKIG :	SCLIGAMPGS	FYSRLFPEES	MHFLHSCYCL	QWLSQVPSGL	VTELGISTNK	180
		GSIYSSKASR	LPVQKAYLDQ	FTKDFTTFLR	IHSEELFSHG	RMLLTCICKG	VELDARNAID	240
	10	LLEMAINDLV '	VEGHLEEEKL	DSFNLPVYIP	SAEEVKCIVE	EEGSFEILYL	ETFKVLYDAG	300
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(FE) (IN) UNF		TCCTGCGGAT	GAATGGAGGC	GAAGGCGATA	CAAGCTACGC	CAAGAATTCA	GCCTACAATC	120
nda	20	AACTGGTTCT	CGCCAAGGTG	AAACCTGTCC	TTGAACAATG	CGTACGGGAA	TTGTTGCGGG	180
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	25	GACGCAAAAT	AGGATCGTGC	CTAATAGGGG	CAATGCCCGG	CTCTTTCTAC	AGCAGACTCT	480
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